THE OFFICE OF REGULATORY STAFF

SURREBUTTAL TESTIMONY

OF

MATTHEW P. SCHELLINGER, II

AUGUST 31, 2018

DOCKET NO. 2018-3-E

ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF DUKE ENERGY CAROLINAS, LLC

SURREBUTTAL TESTIMONY OF

MATTHEW P. SCHELLINGER II

ON BEHALF OF

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2018-3-E

IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF

DUKE ENERGY CAROLINAS, LLC

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Matthew P. Schellinger II. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina, 29201. I am employed by the Office of Regulatory Staff ("ORS") in the Utility Rates and Services Division as a Regulatory Analyst.

Q. DID YOU FILE DIRECT TESTIMONY AND EXHIBITS RELATED TO THIS PROCEEDING?

A. Yes. I filed direct testimony and eleven (11) exhibits with the Public Service Commission of South Carolina ("Commission") on August 17, 2018.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony filed by Duke Energy Carolinas, LLC's ("DEC" or "Company") witness Steven Capps on August 24, 2018. Specifically, I will address the outage at Oconee Unit 3 on July 24, 2017 and the results of ORS's review of the causes of the outage.

Q. PLEASE DESCRIBE ORS'S REVIEW REGARDING POWER PLANT OUTAGES.

A. ORS currently reviews all fossil, hydro and nuclear power plant outages that occur during each review period for DEC. This review consists of an examination of documentation provided by DEC related to the cause, length, and impact of every outage. ORS's review includes interviews of Company personnel on significant fossil and hydro outages as well as every nuclear outage.

Q. PLEASE EXPLAIN WHAT REGULATORY REQUIREMENTS FORM THE BASIS FOR REVIEW OF NUCLEAR OUTAGES.

A. Per S.C. Code § 58-27-865(f):

> "There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation facility or system, as applicable, if the utility achieved a net capacity factor of ninety-two and one-half percent or higher during the period under review."

ORS does not challenge the fact that, in this review period, the Company achieved a net capacity factor for its fleet of nuclear generation facilities above 92.5%. However, the Company's achievement of a capacity factor above 92.5% does not prohibit ORS or any party from making an examination of the cause, length and impact of all nuclear outages and presenting the results and recommendations from the examination to the Commission.

Q. PLEASE DESCRIBE THE COMPANY'S MISSED OPPORTUNITIES FOR TRAINING THAT CONTRIBUTED TO THIS OUTAGE.

A. Following a forced outage at the Duke Energy Progress ("DEP") Robinson Nuclear Plant beginning August 24, 2016[1], a Corrective Action to Prevent Recurrence ("CAPR") was developed. Both DEC and DEP identified opportunities to prevent similar plant trips

[1] This outage was addressed in Docket No. 2017-1-E.

resulting from the additional risks inherent when working close to components that could cause plant trips.

The CAPR identified additional policies and procedures for their Nuclear Department personnel such as clearly identifying and labeling all Single Point Vulnerabilities ("SPV") and taking additional effort to mitigate risks when operating within two feet of SPVs. The Company identified the critical nature of SPV's when staff is working near SPVs and implemented additional risk recognition and risk mitigation with Company work orders in areas identified as having SPVs. Company management did not identify that Transmission Department personnel could and would be working near SPVs in the switchyard. Consequently, Transmission personnel did not receive the training on risk recognition and risk mitigation resulting from working in close proximity to SPVs.

Q. IS A HISTORY OF REPEATED ERROR A KEY INDICATOR ON WHETHER THE COMPANY HAS TAKEN REASONABLE STEPS TO SAFEGUARD AGAINST ERROR?

A. A history of repeated error is an important indicator of whether the Company has taken reasonable steps to safeguard against error, but it is not the only indicator. A lack of history of repeated errors simply indicates the Company made corrective action to prevent the incident from occurring in the future, not that it had acted reasonably on the specific occurrence.

The Company's assertion regarding repeated errors is not consistent with the inadvertent trip at the DEP Robinson Nuclear Plant that generated the need for a CAPR. In fact, the Company admits that a contributing cause to the Oconee Unit 3 outage was a missed opportunity to effectively implement a program for working in close proximity to

SPVs that also incorporated the Transmission organization. Due to an oversight in the implementation of training, an employee working near an SPV caused the plant to trip which resulted in an outage.

Q. DOES ORS DISPUTE THAT THE PRIMARY CAUSE OF THE OUTAGE WAS DUE TO HUMAN ERROR?

A. No, ORS agrees with Company witness Capps that the Oconee Unit 3 outage is primarily the result of a human error made by a technician with extensive experience.

Q. IS HUMAN ERROR THE ONLY CAUSE OF THE OCONEE UNIT 3 OUTAGE?

A. No, there was a secondary factor. The Company, in its review of the outage, identified an instance in which the Company missed an opportunity to train all appropriate personnel on policies and procedures designed to alert technicians working in high risk areas. It is ORS's opinion that had the technicians been properly trained on the risks involved in working near SPVs, additional diligence would have occurred on behalf of the technicians, and the outage could have been prevented.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.